

DISCLAIMER: These Standard Operating Procedures (SOP's) are for the exclusive use of Navy Public Works Center (PWC) Norfolk. They are promulgated as guidance for their NAVFAC Commands. If intended to be used by other activities, they must be tailored to each activity's particular requirements and must be reviewed/approved by the activity's safety professionals prior to use.

Standard Operating Procedures
Confined Space Entry - Manholes

PPE Required:

- Back brace (if in the back brace program)
- Safety shoes
- Hard hat
- Leather gloves
- Safety goggles
- Personal harness retrieval unit

Equipment Required:

- Manhole cover hook
- Gas-free meter
- Fiberglass ladder
- Blower with extension hose
- Explosion-proof lighting

References:

1. PWC Occupational Safety and Health Program Manual, PWCNORVAINST 5100.33E
2. PWC Occupational Safety and Health Standard Operating Procedures For Confined Space Entry Program, Safety Office SOP No. 001

Procedures:

1. Effect traffic control plan (if manhole is in vehicular or pedestrian thoroughfare.)
Reference SOP 621.3 SAN 028, Traffic Control.

2. Remove manhole cover. Remove manhole cover by using proper lifting device or manhole cover hook.

NOTE: The gas-free part of this procedure may only be performed by a certified confined space person (CSP.)

3. Break plane of entry with gas-free meter only.
4. Test atmosphere until meter registers results.

5. Examine meter results and determine if the space is safe for entry.
 6. If space is safe for entry, CSP enters space and looks for hazards associated with the manhole.
 7. CSP briefs the Entry Supervisor and acquires signature on the permit.
 8. CSP writes-up gas-free permit (yellow) or rejection ticket (pink).
 9. Post this ticket immediately adjacent to the point of entry.
 10. If a space is safe for entry, CSP then determines if continuous monitoring is necessary. If it is determined that continuous monitoring is not necessary. Cut off meter and conclude testing. If continuous monitoring is necessary, proceed with testing.
 11. If a space is not determined to be safe for entry after initial testing, a pink rejection ticket will be posted and additional ventilation will be required. A blower exhaust fan may be used to provide the necessary air exchanges.
 12. After additional ventilation is provided, re-test space. Repeat steps 3 through 11 as necessary.
 13. Once testing indicates the space is safe for entry, performing work center will set-up personal harness retrieval unit and/or ladder as required by the CSP.
- NOTE: The Entry Supervisor is responsible for ensuring all safety procedures are followed by the performing work center.
14. Performing work center will proceed with required work in the manhole.
 15. After work in the manhole is complete, return jobsite to the normal state and discontinue monitoring, if applicable.
 16. Remove personal harness retrieval unit and/or ladder.
 17. Replace manhole cover.